

REMARKS

Favorable reconsideration of the subject application in the light of the foregoing amendments, and in the light of the following remarks, are respectfully requested.

By the present amendment, the dependency of Claim 11 has been amended. It is believed that the amendment to Claim 11 overcomes the rejection under 35 U.S.C. § 112. Claim 8 has also been amended to recite that the stretching occurs at a temperature above the crystallization temperature of the polyester used. Support for this amendment is found, for example, on page 4, last paragraph of the specification. Claim 15 has also been added, dependent from claim 8, to round out the scope of protection sought.

Turning now to the outstanding office action:

35 U.S.C. § 112 Rejection

Claim 11 is rejected under 35 U.S.C. § 112, second paragraph as it depends on cancelled claim 9. The dependency of claim 11 has been amended so that claim 11 now depends from claim 8.

Accordingly, favorably reconsideration and withdrawal of the Examiner's rejection under 35 U.S.C. § 112 are respectfully requested.

Rejections Under 35 U.S.C. § 102 and § 103

The Examiner rejects Claims 1-4, 6-7 and 13-14 under 35 U.S.C. § 102 as being anticipated by, or in the alternative, under 35 U.S.C. § 103 as being obvious over HEIDEL et al. (U.S. Patent No. 6,436,510). For the following reasons, however, the Examiner's rejection is most respectfully traversed by applicants.

The presently claimed invention relates to a core comprised of non-woven polyester filaments which is bound by a binder and which has a latent shrinkage force of 2 N/5 cm to 20 N/5 cm. This particular shrinkage force has been found to be important. The presence of this shrinkage force is relieved when the non-woven core is stressed by heat in further

processing operations. The shrinkage force allows the core to counteract the strain. Strain of this kind is produced if, for example, the non-woven is drawn through a bath of hot liquid or if the non-woven has an opportunity to sag as it is fed onward. In general, the core has high thermal dimensional stability due to the recited shrinkage force.

As discussed on page 4 of the present specification, this shrinkage force is obtained by consciously stretching the non-woven after drying. This stretching is done after drying and generally at a temperature which is above the crystallization temperature of the polyester used. The stretching is continual until the shrinkage force has built up within the desired range. Thus, the shrinkage in combination with the heating above the crystallization temperature is controlled in order to develop the shrinkage force in the non-woven.

The prior art is totally devoid of any suggestion of obtaining such a non-woven core, or how to obtain such a non-woven core. HEIDEL et al. cannot inherently anticipate the presently claimed invention as it does not provide the necessary stretching of the polyester filaments. This latent shrinkage force is not inherently present in the polyester fibers, but must be introduced through the particular process of the present application.

Inherency also requires that the characteristic must be in existence. Since the characteristic itself is not inherent, and it is only introduced by a process step which HEIDEL et al. does not do, HEIDEL et al. cannot inherently anticipate the claimed subject matter.

Accordingly, it is respectfully submitted that HEIDEL et al. does not and cannot anticipate, nor render obvious Claims 1-4, 6-7 and 13-14. There is no disclosure or suggestion in HEIDEL et al. as to the introduction of shrinkage force within the non-woven, or how to obtain such a shrinkage force, especially within the recited ranges of the present claims. Favorable reconsideration and withdrawal of the Examiner's rejection of Claims 1-4, 6-7 and 13-14 over HEIDEL et al. are therefore respectfully requested.

Claims 8-12 presently stand rejected under 35 U.S.C. § 103 as being unpatentable over HEIDEL et al. taken further in view of TOPOLKARAEV et al. (U.S. Patent No. 6,533,987). For the following reasons, however, the Examiner's rejection is most respectfully traversed by applicants.

As noted above, HEIDEL et al. is devoid of the necessary stretching step in a process for introducing the shrinkage force. The secondary reference TOPOLKAREV et al. has been added by the Examiner in order to cure the deficiencies of HEIDEL et al. However, it is submitted by applicants that the combination is not proper, and in any case, inadequate.

The Examiner attempts to apply TOPOLKARAEV et al. for its teaching of how to deform materials. However, TOPOLKARAEV et al. describes the stretching process to involve, optionally heating to low temperatures. The reference specifically teaches away from using high temperatures, stating that "the drawing temperature is not more than about 120°C and, desirably, not more than about 90°C." See column 9, lines 6-8. Never does TOPOLKARAEV et al. allow the temperature to go above the crystallization temperature during stretching, as recited in claim 8. Therefore, even if one were to combine the two references as proposed by the Examiner, one of ordinary skill would be directed away from the claimed subject matter of claims 8-12 (and 15).

Accordingly, it is respectfully submitted that the combination of HEIDEL et al. and TOPOLKARAEV et al. would not suggest to the skilled artisan the method recited in Claims 8-12 of the present application. It is believed that the proposed combination is not proper, as HEIDEL et al. does not involve stretching, or even suggest such a step. Even if one were to consider the two references together, however, it is submitted that the claimed process would still not be obtained or suggested to the skilled artisan for the reasons discussed above.

Therefore, favorable reconsideration and withdrawal of the Examiner's rejection of Claims 8-12 under 35 U.S.C. § 103 over HEIDEL et al., taken further in view of TOPOLKARAEV et al., are respectfully requested.

From the forgoing, further and favorable action in the form of a Notice of Allowance believed to be next in order, and such action is earnestly solicited.

Respectfully submitted,

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